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(54) Title: PREPARATION METHOD OF SOLID TITANIUM CATALYST FOR OLEFIN POLYMERIZATION

(57) Abstract: The present invention relates to a preparation method of a solid titanium catalyst for olefin polymerization. Particularly, the present invention relates to a preparation method of a solid titanium catalyst for olefin polymerization, which comprises the steps of: (1) preparing a magnesium compound solution by dissolving a magnesium halide compound into a mixed solvent of a cyclic ether and one or more of alcohol; (2) preparing a carrier by, adding a mixture of titanium compound and halogenated hydrocarbon to the magnesium compound solution at low temperature and then elevating the temperature of the resulted solution for reaction; and (3) preparing a solid titanium catalyst by reacting the carrier with a titanium compound and an electron donor. According to the method of the present invention, it is possible to obtain a catalyst for olefin polymerization having high polymerization activity and well-controlled particle shape and size with high catalyst production yield, and producing polymers with high stereoregularity and high bulk density when used in olefin polymerization.